Panel on Post-Crisis Growth Performance – Determinants, Effects and Policy Implications

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Outline

- ***(i)*** **Delayed recovery and deflationary tendencies**
- ***(ii)*** **Factors behind the delayed recovery**
- ***(iii)*** **Post crisis investment**
- ***(iv)*** **What is the end-game?**

Where are the advanced economies seven years after subprime?

The 2007-2009 Crisis: Severity measures

- **It is premature to construct a definitive measure of the severity of the recent crises**
- **Of the twelve countries experiencing a systemic crisis starting in 2007-2008 (France, Germany, Greece, Iceland, Ireland, Italy, Netherlands, Portugal, Spain, Ukraine, UK, and US), only Germany and the US have reached their pre-crisis peak in per capita GDP.**

Output, Crises and Recovery

Reinhart and Rogoff (2014) updated with World Economic Outlook, April 2015

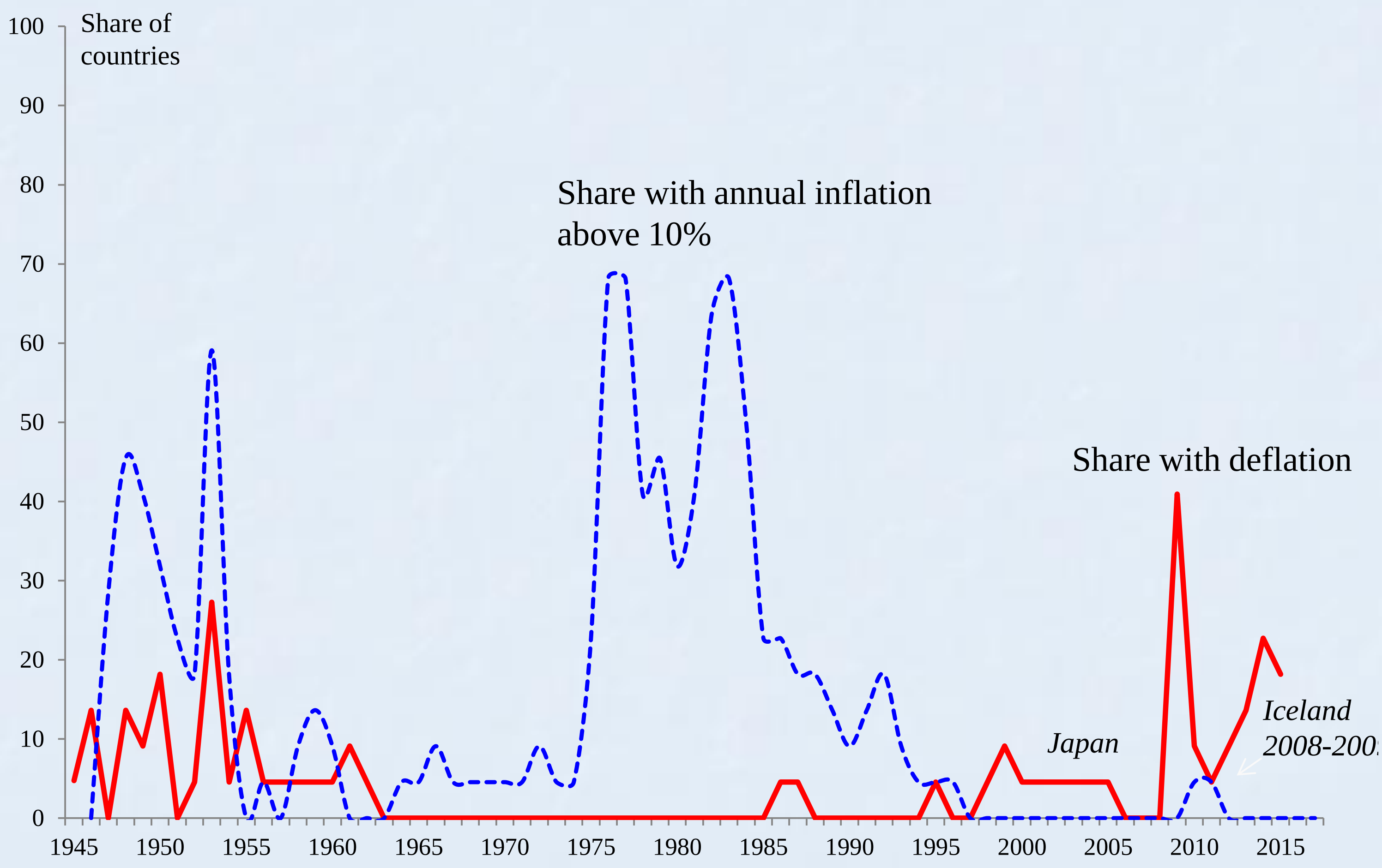
12 Systemic banking crises, 2007-2008

			% change	Number of years			
	Year	Country	Peak to trough	Peak to trough	Peak to recovery	Severity index	Breakeven year
1	2008	France	-3.8	2	*9*	*12.8*	*2016*
2	2008	Germany	-5.3	1	3	8.3	2011
3	2008	Greece	-25.8	*6*	*14*	*39.8*	***2021??***
4	2007	Iceland	-9.9	3	*9*	*18.9*	*2016*
5	2007	Ireland	-12.6	3	*11*	*23.6*	*2018*
6	2008	Italy	-10.8	*7*	*14*	*24.8*	***2021??***
7	2008	Netherlands	-5.0	*5*	*10*	*15.0*	*2018*
8	2008	Portugal	-7.4	*6*	*12*	*19.4*	*2019*
9	2008	Spain	-9.0	*6*	*11*	*20.0*	*2018*
10	2008	Ukraine	-14.8	1	*12*	*26.8*	*2020*
11	2007	United Kingdom	-5.9	5	*8*	*13.9*	*2015*
12	2007	United States	-4.8	2	6	10.8	2013
	Summary:	Mean	-9.6	3.9	9.9	19.5	
		Median	-8.2	4.0	10.5	19.2	
		Standard deviation	6.1	2.2	3.2	8.6	

Note: The italics denote any calculations in which IMF estimates for 2015-2020 are used.

- **The number of years to recover the pre-crisis peak in per capita GDP in 100 of the worst crises since the 1840s is about 8 years (the median is 6 1/2 years).**
- **In the 2007-2008 wave of crises, the average may come in closer to 10 years.**

The incidence of deflation and high inflation, 22 advanced economies, 1945-2015

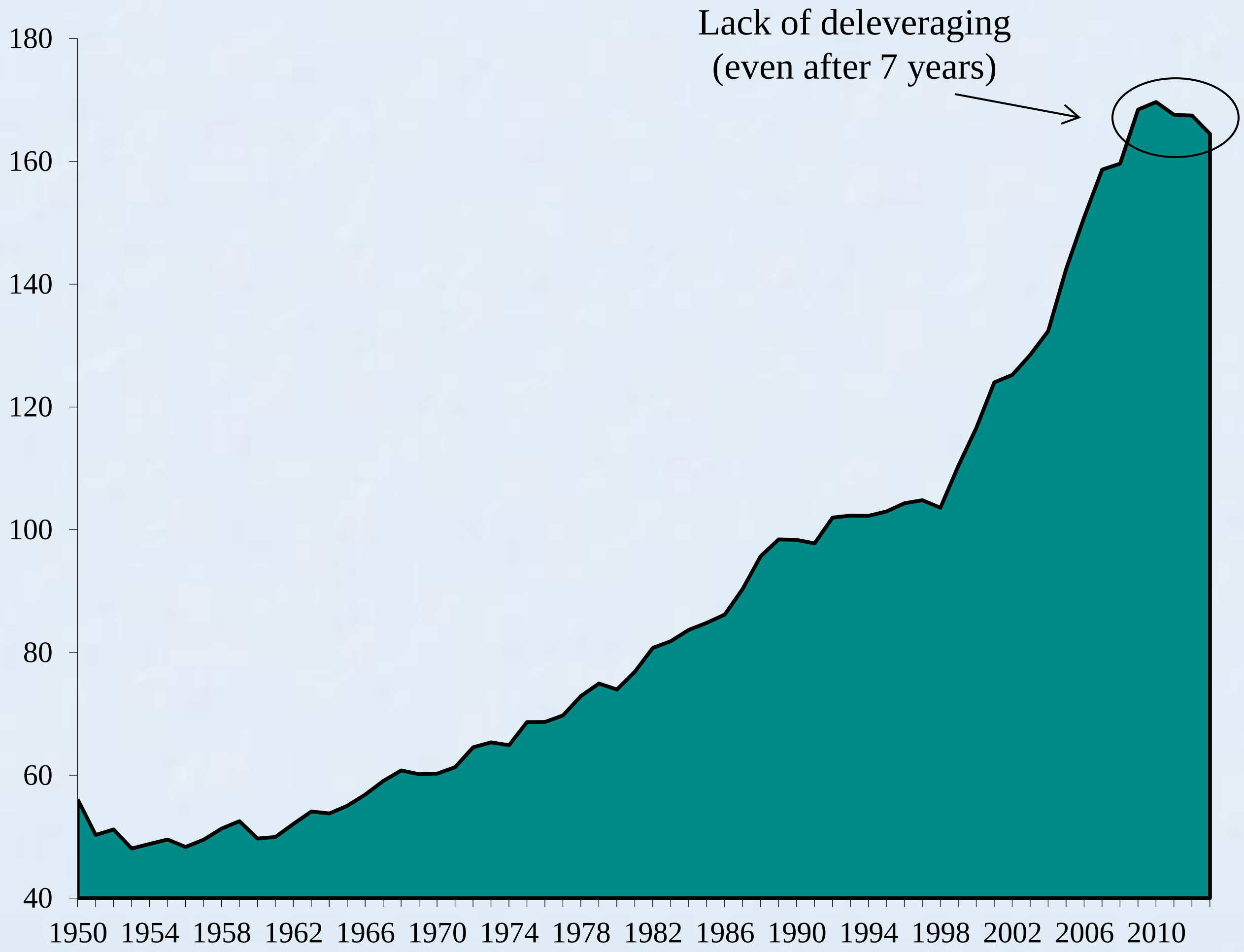


What factors have made this crisis so protracted? What is the end-game?

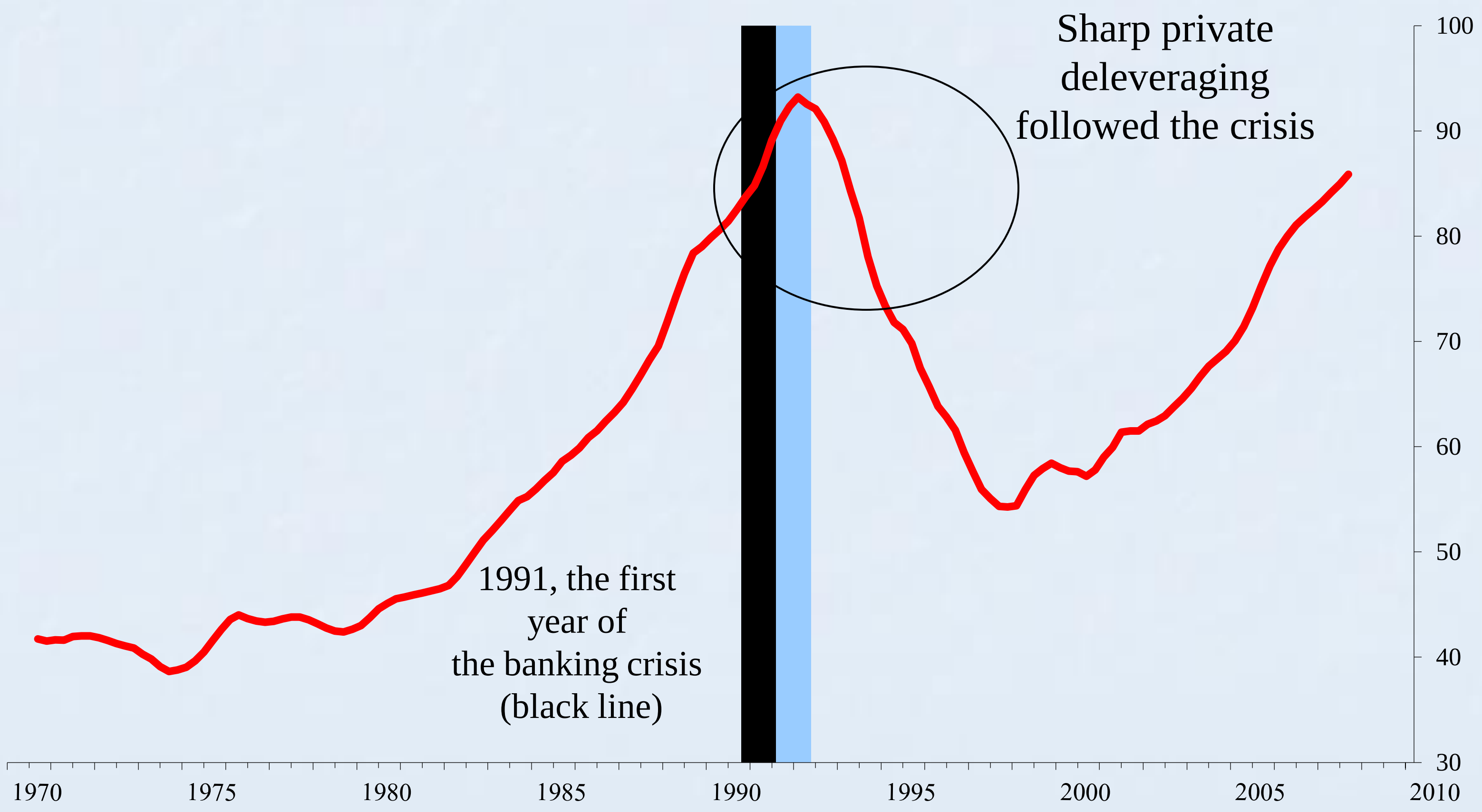
The list includes:

- **the synchronous nature of the crisis,**
- **the absence of greater exchange rate adjustment,**
- **austerity,**
- **the dearth of credit—(external or domestic),**
- ***the lack of deleveraging and write-downs (private or public) almost a decade later.***

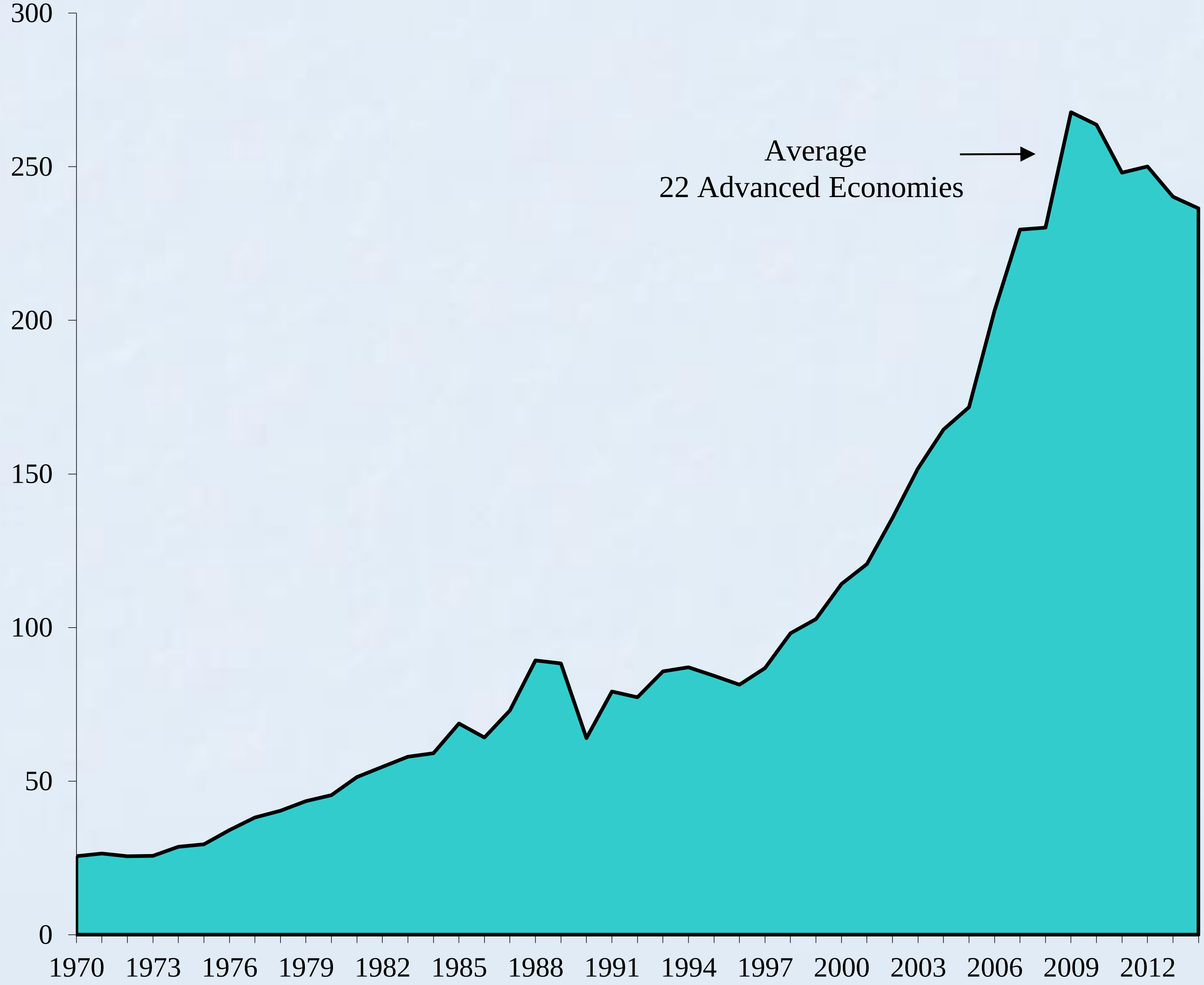
Private Domestic Credit as a Percent of GDP Advanced Economies, 1950-2014



The contrast of the Nordic Crises: Finland, domestic credit around the 1991 crisis

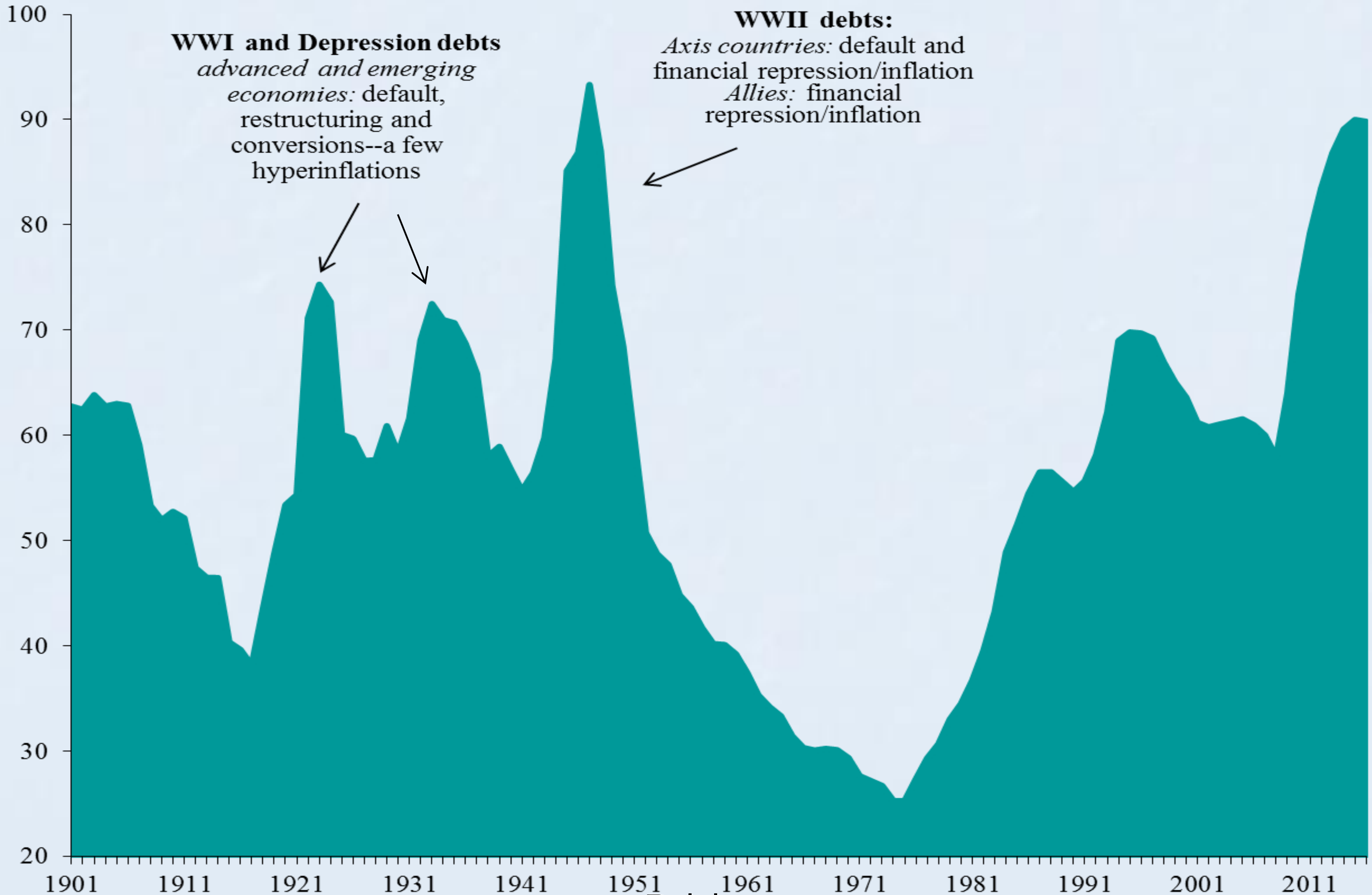


Gross Total (Public plus Private) External Debt as a Percent of GDP: 22 Advanced Economies, 1970-2014



The contrast of the Asian Crisis: External Total (Public plus Private) External Debt in Six Asian Economies, 1970-2013

Public debt as a percent of GDP: Advanced Economies: 1900-2015



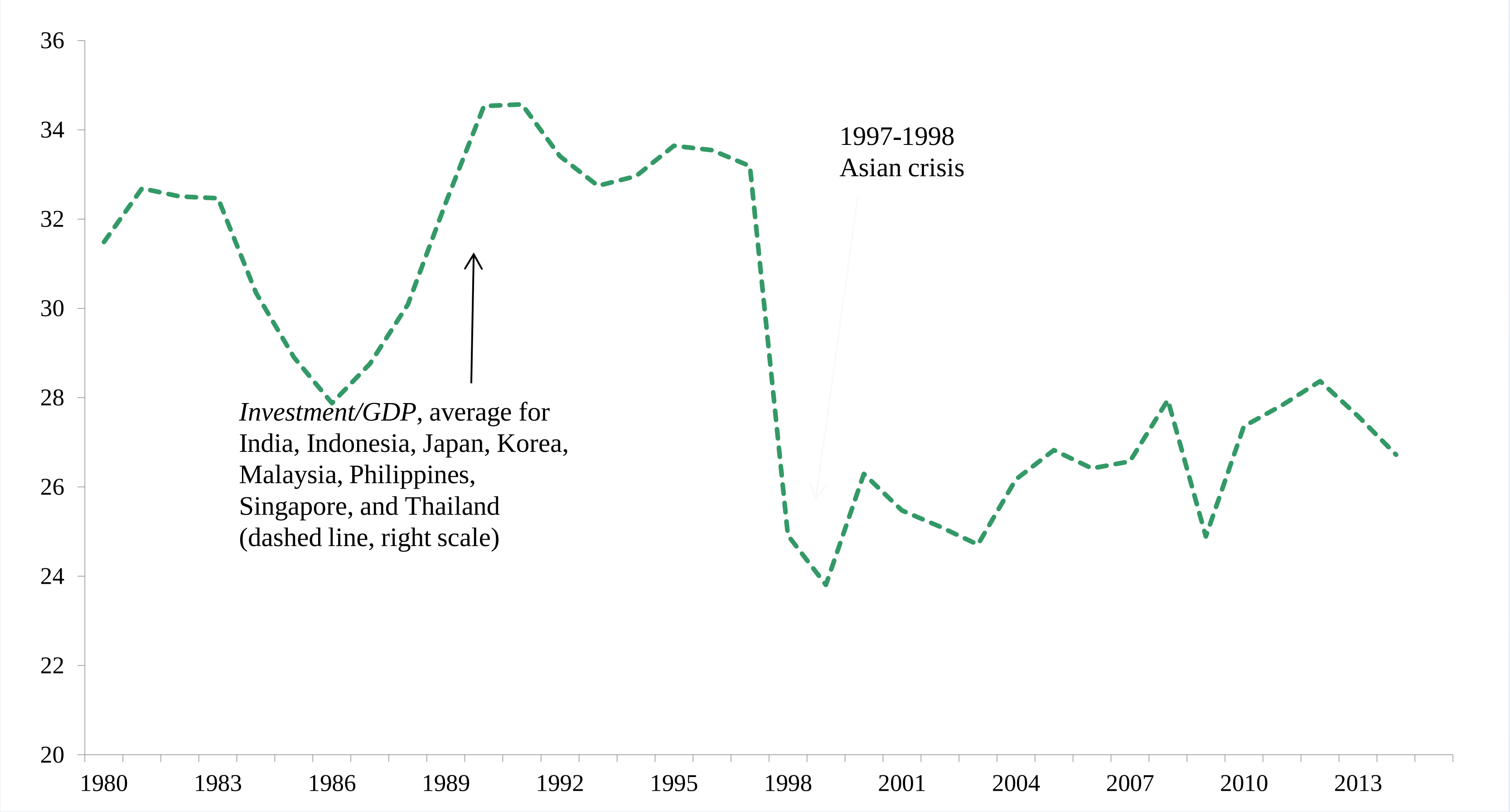
Investment in the shadow of severe crises *and BOP Identities…(Reinhart and Tashiro, 2014)*

	1987-1997	1998-2012	Difference
Current Account Balance/GDP	-1.1	2.6	3.6*
Total Investment/GDP	33.4	27.1	-6.3*
Real GDP Growth	7.2	4.7	-2.5*
Number of observations	99	135	* Denotes significant at usual levels

$CA + KA + RA \equiv 0$.

Notice that $RA < 0$ implies an accumulation of reserves by the monetary authority. $CA \equiv S - I$.

The post Asian crisis investment collapse—look familiar?



What is the endgame?

Throughout history, debt/GDP ratios have been reduced by:

(i) economic growth;

(ii) fiscal adjustment/austerity;

(iii) explicit default or restructuring;

(iv) a sudden surprise burst in inflation; and

(v) a steady dosage of financial repression that is accompanied by an equally steady dosage of inflation.

Public debt reduction has not always been orthodox --even in advanced economies

Reinhart, Reinhart and Rogoff (2015)

Factors Behind Debt Reversals:

Fiscal Adjustment, Restructuring, Inflation, Growth, and Real Interest Rates

	Growth > median	Primary balance > median	Real rates < median	Inflation > median	Default or restructure
Total sample, 70 episodes					
Number of episodes	38	41	41	41	16
Share	0.54	0.61	0.59	0.59	0.23
Post-war cases, 36 episodes					
Number of episodes	21	16	30	30	9
Share	0.58	0.48	0.86	0.83	0.25
Peacetime, 34 episodes					
Number of episodes	17	25	11	11	7
Share	0.50	0.74	0.32	0.32	0.21

Memorandum items:

Share of debt reduction episodes associated with deflation

Total	0.07
War	0.11
Peace	0.03

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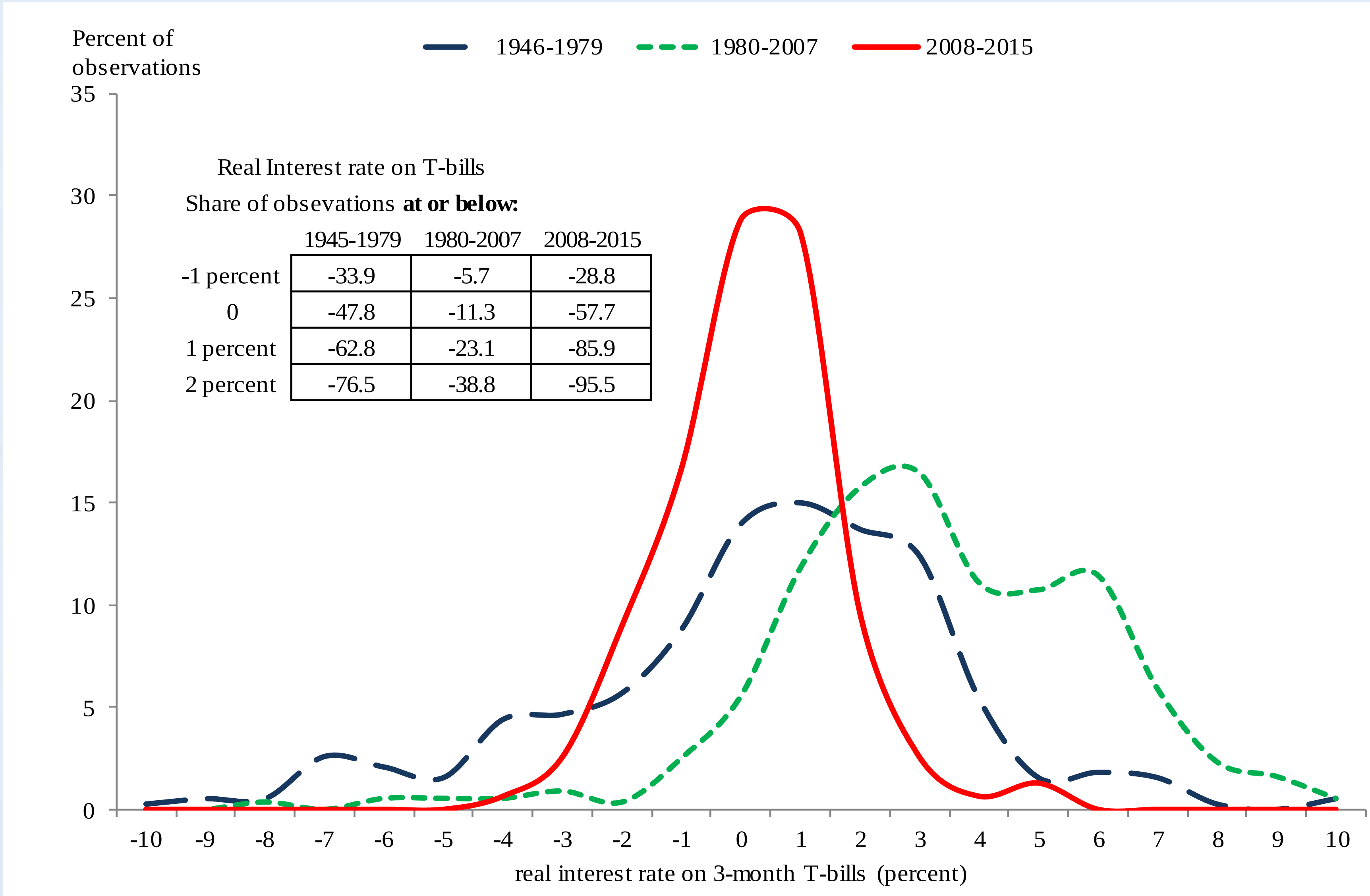
Real T-bill Rates Frequency Distributions: 22 Advanced Economies, 1945-2015 (Reinhart and Sbrancia, 2015 update)



Real Interest rate on T-bills

Share of obsevations **at or below:**

	1945-1979	1980-2007	2008-2015
-1 percent	-33.9	-5.7	-28.8
0	-47.8	-11.3	-57.7
1 percent	-62.8	-23.1	-85.9
2 percent	-76.5	-38.8	-95.5